Practitioner's Docket No.



PATENT

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Box Patent Application Assistant Commissioner for Patents Washington, D.C. 20231

NEW APPLICATION TRANSMITTAL

Transmitted he	rewith for filin	ig is th	ne patent application of
Inventor(s):	JAMES	K	HARTWELL

WARNING: Patent must be applied for in the name(s) of all of the actual inventor(s). 37 CFR 1.41(a) and 1.57(b). For (title):

CERTIFICATION UNDER 37 C.F.R. 1.10*

(Express Mail label number is mandatory.)
(Express Mail certification is optional.)

I hereby certify that this New Application Transmittal and	l the documents referred to as attached therein are being deposited
with the United States Postal Service on this date	, in an envelope as "Express Mail Post Office to
Addressee," mailing Label Number	addressed to the: Assistant Commissioner for
Patents, Washington, D.C. 20231.	

DONALD R BAHR

type or print name of person mailing paper,

Signature of person mailing paper

WARNING: Certificate of mailing (first class) or facsimile transmission procedures of 37 C.F.R. 1.8 cannot be used to obtain a date of mailing or transmission for this correspondence.

WARNING: Each paper or fee filed by "Express Mail" must have the number of the "Express Mail" mailing label placed thereon prior to mailing. 37 C.F.R. 1.10(b).

"Since the filing of correspondence under § 1.10 without the Express Mail mailing label thereon is an oversight that can be avoided by the exercise of reasonable care, requests for waiver of this requirement will not be granted on petition." Notice of Oct. 24, 1996, 60 Fed. Reg. 56,439, at 56,442.

(Application Transmittal [4-1]---page I of 9)

17538 U.S. PTO 10/612183

1. Type of A	Application
• •	plication is for a(n) (check one applicable item below)
1	Original (nonprovisional)
· -	Design
***************************************	Plant
	1 Min
WARNING:	Do not use this transmittal for a completion in the U.S. of an International Application under 35 U.S.C. 371(c)(4), unless the International Application is being tied as a divisional, continuation or continuation-in-part application.
WARNING:	Do not use this transmittal for the filing of a provisional application.
TRANS	of the following 3 items apply, then complete and attach ADDED PAGES FOR NEW APPLICATION EMITTAL WHERE BENEFIT OF A PRIOR U.S. APPLICATION CLAIMED and a NOTIFICATION RENT APPLICATION OF THE FILING OF THIS CONTINUATION APPLICATION.
_ Di	visional.
Ca	ontinuation.
*	ontinuation-in-part (C-I-P).
2. Benefit o	of Prior U.S. Application(s) (35 U.S.C. 119(e), 120, or 121)
case, o of a pri ADDEI	new application being transmitted is a divisional, continuation or a continuation-in-part of a parent rewhere the parent case is an International Application which designated the U.S., or benefit ior provisional application is claimed, then check the following item and complete and attach DPAGES FOR NEW APPLICATION TRANSMITTAL WHERE BENEFIT OF PRIOR U.S. APPLICAS) CLAIMED.
WARNING:	If an application claims the benefit of the filing date of an earlier filed application under 35 U.S.C. 120, 121 or 365(c), the 20 year term of that application will be based upon the filing date of the earliest U.S. application that the application makes reference to under 35 U.S.C. 120, 121 or 365(c). (35 U.S.C. 154(a)(2) does not take into account, for the determination of the patent term, any application on which priority is claimed under 35 U.S.C. 119, 365(a) or 365(b).) For a c-i-p application, applicant should review whether any claim in the patent that will issue is supported by an earlier application and, if not, the applicant should consider canceling the reference to the earlier filed application. The term of a patent is not based on a claim-by-claim approach. See Notice of April 14, 1995, 60 Fed. Reg. 20,195, at 20,205.
WARNING:	When the last day of pendency of a provisional application falls on a Saturday, Sunday, or Federal holiday within the District of Columbia, any nonprovisional application claiming benefit of the provisional application must be filed prior to the Saturday, Sunday, or Federal holiday within the District of Columbia. See 37 C. F. R. § 1.78(a)(3).
En	The new application being transmitted claims the benefit of prior U.S. application(s). closed are ADDED PAGES FOR NEW APPLICATION TRANSMITTAL WHERE ENEFIT OF PRIOR U.S. APPLICATION(S) CLAIMED.
or 37 C.F 6 3 1 1	nclosed That Are Required for Filing Date under 37 C.F.R. 1.53(b) (Regular) F.R. 1.153 (Design) Application Pages of specification Pages of claims Pages of Abstract Sheets of drawing formal
-	informal

(Application Transmittal [4-1]---page 2 of 9)

WARNING:

DO NOT submit original drawings. A high quality copy of the drawings should be supplied when filing a patent application. The drawings that are submitted to the Office must be on strong, white, smooth, and non-shiny paper and meet the standards according to § 1.84. If corrections to the drawings are necessary, they should be made to the original drawing and a high-quality copy of the corrected original drawing then submitted to the Office. Only one copy is required or desired. Comments on proposed new 37 CFR 1.84. Notice of March 9, 1988 (1990 0.G. 57-62).

NOTE: "Identifing indicia, if provided, should include the application number or the title of the invention, inventor's name, docket number (if any), and the name and telephone number of a person to call if the Office is unable to match the drawings to the proper application. This information should be placed on the back of each sheet of drawing a minimum distance of 1.5 cm. (5/8 inch) down from the top of the page." 37 C.F.R. 1.84(c)).

(complete the following, if applicable)

☐ The enclosed drawing(s) are photograph(s), and there is also attached a "PETITION TO ACCEPT PHOTOGRAPH(S) AS DRAWING(S)." 37 C.F.R. 1.84(b).

4. Additional	papers	enc	losed
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Preliminary Amendment
Information Disclosure Statement (37 C.F.R. 1.98)
Form PTO-1449 (PTO/SB/08A and 08B)
Citations
Declaration of Biological Deposit
Submission of "Sequence Listing," computer readable copy and/or amendment pertaining thereto for biotechnology invention containing nucleotide and/or amino acid sequence.
Authorization of Attorney(s) to Accept and Follow Instructions from Representative
Special Comments
Other

5. Declaration or oath

ΚJ	Enclosed
	Executed by

(check all applicable boxes)

 \boxtimes inventor(s).

 \square legal representative of inventor(s). 37 CFR 1.42 or 1.43.

- ☐ joint inventor or person showing a proprietary interest on behalf of inventor who refused to sign or cannot be reached.
- ☐ This is the petition required by 37 CFR 1.47 and the statement required by 37 CFR 1.47 is also attached. See item 13 below for fee.
- □ Not Enclosed.

WARNING:

Where the filing is a completion in the U.S. of an International Application, but where a declaration is not available, or where the completion of the U.S. application contains subject matter in addition to the International Application, the application may be treated as a continuation or continuation-in-part, as the case may be, utilizing ADDED PAGE FOR NEW APPLICATION TRANSMITTAL WHERE BENEFIT OF PRIOR U.S. APPLICATION CLAIMED.

	• -	ation is made by a person authorized under 37 C.F.R. 1.41(c) on behalf of all ove named inventor(s).
•	claration (lbsequentl	or oath, along with the surcharge required by 37 CFR 1.16(e) can be
NOTE:	□ Showi	ant that all the correct inventor(s) are named for filing under 37 CFR 1.41(c) and 1.53(b). In any that the filing is authorized.
	(not re	quired unless called into question. 37 CFR 1.41(d))
6. Inv	entorship	Statement
WARNI	01	the named inventors are each not the inventors of all the claims an explanation, including the various claims at the time the last claimed invention was made, should be bmitted.
The in	entorship .	for all the claims in this application are:
	The sa	
	•	OR
		e same. An explanation, including the ownership of the various claims at the time st claimed invention was made,
		is submitted.
		will be submitted.
7. Lai	guage	
NOTE:	A verified E required by	ion including a signed oath or declaration may be filed in a language other than English. nglish translation of the non-English language application and the processing fee of \$130.00 37 CFR 1.17(k) is required to be filed with the application, or within such time as may be set e. 37 CFR 1.52(d).
NOTE:	A non-Engi 37 CFR 1.6	lsh oath or declaration in the form provided or approved by the PTO need not be translated. 9(b)
	🛭 English	i
	□ Non-E	'nglish
	☐ The at	tached translation is a verified translation. 37 C.F.R. 1.52(d).
8. Ass	ignment	
	•	nent of the invention to
		ACCOUNT OF ACCOUNT OF A COUNTY
_ is		A separate "COVER SHEET FOR ASSIGNMENT (DOCUMENT)
		COMPANYING NEW PATENT APPLICATION" or FORM PTO 1595 is also
		tached.
	□ wil	l follow.
NOTE:	the assignm	nment is submitted with a new application, send two separate letters-one for the application and one for ent." Notice of May 4, 1990 (1114 O.G. 77-78).
WARN		newly executed "CERTIFICATE UNDER 37 CFR 3.73(b)" must be filed when a continuation-in-part

Country	Ap	ppln. no.	Filed
Country	Ap	Appln. no.	Filed
Country		ppln. no.	Filed
from which priori	tv is claimed		
· -) attached.		
. 🗆 🗆 will fol			
	application forming the basis for the clo 5(a) and 1.63.	aim for priority mus	st be referred to in the oath or declaratio
application itself entitle	for any foreign priority for which the ap or International Application from which d to priority from a prior foreign applic ICATION TRANSMITTAL WHERE BEN	this application cl ation, then complet	aims benefit under 35 U.S.C. 120 is e item 18 on the ADDED PAGES FOR
	tion (37 C.F.R. 1.16)		
	tion (37 C.F.R. 1.16) ar application		
	ar application	AS FILED	
	ar application CLAIMS	AS FILED Rate	Basic Fee 37 C.F.R. 1.16(a)
A Reguld Number fi	ar application CLAIMS	_	
A Reguld Number fi Total Claims (37 CFR 1	ar application CLAIMS	Rate	
A. Reguld Number fi Total Claims (37 CFR 1	ar application CLAIMS. led Number Extra $.16(c))20-20=0 x$	Rate	
A. Regulo Number fi Total Claims (37 CFR 1 Independent Claims (37 CFR 1	ar application CLAIMS. led Number Extra $.16(c))20-20=0 x$ $.16(b)) 2-3=0 x$	Rate	
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A. Reguld Number fi Total Claims (37 CFR 1 Independent Claims (37 CFR 1 Multiple depender	ar application CLAIMS. led Number Extra $ \frac{16(c)}{20} = 0 x $ $ \frac{16(b)}{2} = 3 = 0 x $ at claim(s),	Rate	
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A. Regulo Number fi Total Claims (37 CFR 1 Independent Claims (37 CFR 1 Multiple depender if any (37 CFR 1.	The application $\frac{CLAIMS}{CLAIMS}$, $\frac{CLAIMS}{D}$, $\frac{16(c)}{20} = \frac{O}{x}$, $\frac{16(b)}{D} = \frac{O}{x} = \frac{O}{x}$, $\frac{16(d)}{D} = \frac{O}{x}$, $\frac{1}{2}$, 1	Rate	
A Reguld Number fi Total Claims (37 CFR 1 Independent Claims (37 CFR 1 Multiple depender if any (37 CFR 1.1 Amena	The application $\frac{CLAIMS}{R}$ and $\frac{CLAIMS}{R}$ and $\frac{R}{R}$ and $\frac{R}{R}$ are claim(s), $\frac{R}{R}$ and canceling extra claims is endingent deleting multiple-dependent.	Rate nclosed. cies is enclosed.	
A Reguld Number fi Total Claims (37 CFR 1 Independent Claims (37 CFR 1 Multiple depender if any (37 CFR 1.1 Amena	The application $\frac{CLAIMS}{CLAIMS}$, $\frac{CLAIMS}{D}$, $\frac{16(c)}{20} = \frac{O}{x}$, $\frac{16(b)}{D} = \frac{O}{x} = \frac{O}{x}$, $\frac{16(d)}{D} = \frac{O}{x}$, $\frac{1}{2}$, 1	Rate nclosed. cies is enclosed.	

expiration of the time period set for response by the Patent and Trademark Office in any notice of fee deficiency.

37 CFR 1.16(d).

Filing Fee Calculation

8 375 (SMALL ENTITY)

В.	☐ Design application			
	(\$320.0037 CI			
		Filing Fee Calculation		\$
<i>C</i> .	☐ Plant application	!		
	(\$530.0037 CF			
		Filing Fee Calculation		\$
11. Sr	nall Entity Statem	ent(s)		
	☐ Verified Statemer	ıt(s) that this is a filing by a	small entity unde	er 37 CFR 1.9 and 1.27 is (are)
	attached.	Dane Aust		
		PPLICANT CLAIMS		
WARNI	including appli patent in which 35 U.S.C. 119(the prior appli the prior appli	nall entity in one application or paications or patents which are direct the status has been established. A ce), 120, 121 or 365(c) of a prior a cation if the nonprovisional application or includes a copy of the vety is still proper and desired." 37 (c)	ctly or indirectly dep A nonprovisional app pplication may rely o cation includes a refe rrified statement filed	endent upon the application or olication claiming benefit under on a verified statement filed in berence to a verified statement in
		(complete the following	, if applicable)	
	☐ Status as a small	entity was claimed in prior	application	,
		, filed on _		, from which benefit
	is being claimed j	for this application under:		
	35 U.S.C. □ 1	, ,		
		20,		
		•		
		365(c),		
	and which status	as a small entity is still prop	er and desired.	
	☐ A copy of the vert	ified statement in the prior a	pplication is incl	uded.
	Filing Fee Calcul	lation (50% of A, B or C abo	ive)	
	\$	_375		
		paid will be refunded if a verified mely payment of a full fee. The tw		
12. Re	equest for Interna	tional-Type Search (37 C	'.F.R. 1.104(d))	
		(complete, if app	olicable)	
	• •	n international-type search i ation on the merits takes pla		plication at the time when

13. Fee Payment Being Made at This Time	
□ Not Enclosed	
☐ No filing fee is to be paid at this time.	
(This and the surcharge required by 37 C.F.R. 1.16(e)	can be paid subsequently.)
□ Enclosed	1 1 27
☐ Basic filing fee	s 375
☐ Recording assignment	
(\$40.00; 37 C.F.R. 1.21(h))	
(See attached "COVER SHEET FOR	
ASSIGNMENT ACCOMPANYING NEW	
APPLICATION".)	\$
☐ Petition fee for filing by other than all the	
inventors or person on behalf of the inventor	
where inventor refused to sign or cannot be	
reached	
(\$130.00; 37 C.F.R. 1.47 and 1.17(h))	\$
☐ For processing an application with a	
specification in a non-English language	
(\$130.00; 37 C.F.R. 1.52(d) and 1.17(k))	\$
☐ Processing and retention fee	
(\$130.00; 37 C.F.R. 1.53(d) and 1.21(l))	\$
☐ Fee for international-type search report	
(\$40.00; 37 C.F.R. 1.21(e))	\$
NOTE: 37 CFR 1.21(1) establishes a fee for processing and retaining	g any application that is
abandoned for failing to complete the application	
pursuant to 37 CFR 1.53(d) and this, as well as the changes	to 37 CFR 1.53 and 1.78.
indicate that in order to obtain the benefit of a	
prior U.S. application, either the basic filing fee must be paid	d. or the processing and
retention fee of § 1.21(l) must be paid, within 1	in, or the processing care
year from notification under § 53(d).	
year from nonfreamen ander § 55(a).	
Total fees enclosed	s 375
Total fees chelosea	Ψ
14. Method of Payment of Fees	
Check in the amount of \$	
☐ Charge Account No. \$ 37.5 in the amount of \$ Pro 2038	
Pro 2038	
A duplicate of this transmittal is attached.	
A aupticate of this transmittal is attached.	•
NOTE: Fees should be itemized in such a manner that it is clear for which purpose the J	fees are paid. 37 CFR 1.22(b).

(Application Transmittal [4-1]---page 7 of 9)

WARNII	WG: If no fees are to be paid on filing, the following items sh	ould <u>not</u> be completed.
WARNI)	NG: Accurately count claims, especially multiple dependent claim charges are authorized.	claims, to avoid unexpected high charges, if extra
	 □ The Commissioner is hereby authorized to charge the and during the entire pendency of this application □ 37 C.F.R. 1.16(a), (f) or (g) (filing fees) □ 37 C.F.R. 1.16(b), (c) and (d) (presentation of extra 	to Account No.
NOTE:	Because additional fees for excess or multiple dependent claims not be paid or these claims canceled by amendment prior to the expiration any notice of fee deficiency (37 CFR 1.16(d)), it might be best not fees, except possibly when dealing with amendments after final acceptance.	ation of the time period set for response by the PTO not to authorize the PTO to charge additional claim
	☐ 37 C.F.R. 1.16(e) (surcharge for filing the basic filing than the filing date of the application) ☐ 37 C.F.R. 1.17 (application processing fees)	ng fee and/or declaration on a date later
WARN	ING: While 37 CFR 1.17(a), (b), (c) and (d) deal with extension should be made only with the knowledge that: "Submission C.F.R. 1.136(a) is to no avail unless a request or petition Notice of November 5, 1985 (1060 O.G. 27).	on of the appropriate extension fee under 37
	☐ 37 C.F.R. 1.18 (issue fee at or before mailing of No. 1.311(b))	otice of Allowance, pursuant to 37 C.F.R.
NOTE:	Where an authorization to charge the issue fee to a deposit accountable Allowance, the issue fee will be automatically charged to the deposit allowance. 37 CFR 1.311(b).	
NOTE:	37 CFR 1.28(b) requires "Notification of any change in status rest must be filed in the application prior to paying, or at the time CFR 1.28(b), (a) notification of change of status must be made eve and (b) no notification is required if the change is to another small	of paying, issue fee." From the wording of 37 on if the fee is paid as "other than a small entity"
Reg. N	Credit Account No Refund R	Donald R Buh SIGNATURE OF PRACTITIONER DONALD R. BAHR (type or print name of attorney) 2608 MERIDA LW
Custon	ner No.	P.O. Address JAMPA, FL. 33618

(Application Transmittal [4-1]page---8 of 9)

Incorporation by reference of added pages
(check the following item if the application in this transmittal claims the benefit of prior U.S. application(s) (including an international application entering the U.S. stage as a continuation, divisional or C-I-P application) and complete and attach the ADDED PAGES FOR NEW APPLICATION TRANSMITTAL WHERE BENEFIT OF PRIOR U.S. APPLICATION(S) CLAIMED)
☐ Plus Added Pages for New Application Transmittal Where Benefit of Prior U.S. Application(s) Claimed
Number of pages added
☐ Plus Added Pages for Papers Referred to in Item 4 Above Number of pages added
☐ Plus "Assignment Cover Letter Accompanying New Application" Number of pages added
Statement Where No Further Pages Added
(if no further pages form a part of this Transmittal, then end this Transmittal with this page and check the following item)
This transmittal ends with this page.